ABSTRACT OF THE DISCLOSURE

A rotary atomizer (1) has a rotary atomizing head (4) driven by an air motor (2) at a rotational speed of 4,000~5,000 rpm, for example. A coating material is supplied to a central portion of the rotary atomizing head (4) through a paint supply pipe (5). The atomizer (1) further includes a supersonic horn (6) having a vibration plane (6a) located adjacent to the outer 10 circumferential perimeter of the rotary atomizing head (4). The vibration plane (6a) is an inclined plane gradually increasing its diameter forward. The coating material immediately after spattered from the outer circumferential perimeter of the rotary atomizing head (4) is exposed to supersonic vibration from the 15 vibration plane (6a), and it is atomized by the supersonic vibration to particles of a uniform grain size. At the same time, the atomized coating material is driven forward.